



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/584,901

01/11/2008

Thomas Scherer

WUE-57

5039

26875 7590 11/16/2009
WOOD, HERRON & EVANS, LLP
2700 CAREW TOWER
441 VINE STREET
CINCINNATI, OH 45202

EXAMINER

TAPOLCAI, WILLIAM E

ART UNIT

PAPER NUMBER

3744

MAIL DATE

DELIVERY MODE

11/16/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/584,901	Applicant(s) SCHERER ET AL.	
	Examiner William E. Tapolcai	Art Unit 3744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 October 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22,24-29,31,32 and 34-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 22,24-29,31,32 and 34-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 3744

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 22, 24-29, 31, 32, and 34-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,513,500 to Fischer et al in view of U.S. Patent No. 4,487,028 to Foye and U.S. Patent No. 3,216,215 to Schuett. Fischer et al discloses the claimed invention of a cooling system for an aircraft including a refrigeration installation 4, a refrigeration consumer 8A and 8B, and a refrigeration transport system 5-7 and 10-12 connecting the refrigeration installation and the refrigeration consumer. However, Fischer et al does not disclose the refrigeration installation as comprising two refrigeration machines operating independently of each other and in parallel, or the bypass pipe having a shut-off valve for bypassing the refrigerating consumer. Foye teaches an air conditioning system which includes two refrigeration machines 11 and 12 which cool a secondary fluid. Column 3, lines 45-48 teach that the refrigeration machines 11 and 12 operate independently of each other and in parallel. Thus, it would be obvious to provide Fischer et al with two refrigeration machines that operate independently of each other and in parallel, in view of Foye, to yield the predictable result of providing redundant systems in case one system fails. Schuett teaches a a refrigeration apparatus comprising a refrigeration installation 6-9, at least one consumer (the incubator hatches #3 and #4), and a refrigeration transport system 11-16 for connecting the refrigeration installation and the consumers. The

Art Unit: 3744

transport system includes a conveying pipe 13 that has a valve 13a for bypassing the consumers. The valve 13a is considered to inherently function as a shutoff valve.

Alternatively, one of ordinary skill in the art would be able to place a shutoff valve in the bypass line. Thus, it would be obvious to provide Fischer et al with a bypass line and shutoff valve, in view of Schuett, to yield the predictable result of bypassing the refrigeration consumers when refrigeration is not needed. With regards to claims 28 and 41, Schuett also teaches a refrigeration system comprising a store 12a for the secondary refrigerant. Thus, it would be obvious to provide Fischer et al with a store for the secondary refrigerant, in view of Schuett, to yield the predictable result of providing the necessary amount of coolant needed to perform the cooling functions required.

3. Applicant's arguments filed October 14, 2009 have been fully considered but they are not persuasive. Schuett is considered to teach the newly cited bypass line and shutoff valve. Alternatively, one of ordinary skill in the art would be able to provide the bypass line with a shutoff valve in order to control the use of the bypass line.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William E. Tapolcai whose telephone number is (571) 272-4814. The examiner can normally be reached on Mon. - Thurs., 6:30 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl J. Tyler can be reached on (571) 272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3744

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/William E. Tapolcai/
Primary Examiner, Art Unit 3744

wet
November 2, 2009